

# District 08 Mobility Performance Report

2016 First Quarter

**DEPARTMENT OF TRANSPORTATION**

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## District 08 Mobility Performance Report

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2016 First Quarter

### EXECUTIVE SUMMARY

#### Overview

Caltrans District 8 contains two counties located in southern California: San Bernardino and Riverside Counties. Both counties are part of the Inland Empire, with Riverside County has a population of almost 2.3 million residents and San Bernardino County with 2.1 million residents. Although these are urban counties, they do contain a large amount of sparsely populated National Forest and National Recreation Area land.

The Mobility Performance quarterly analysis compares information with over a year ago and over last quarter in the following performance measures:

- Vehicle Miles of Travel (VMT))
- Vehicle Hours of Delay (VHD), Bottleneck Locations
- Lost Lane Miles (equivalent lost productivity)
- Detector Health

This information is based on data collected every day of the quarter, twenty-four hours a day, by automated vehicle detector stations deployed on urban-area freeways where congestion is regularly experienced. The MPR presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The delay at the 35 mph threshold represents severe congestion while delay at 60 mph represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based upon engineering experience and District input.

## FINDINGS

In the First quarter of 2016, total delay equaled 1.7 million VHD at the 35 mph speed threshold, and 5.5 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 23 thousand VHD at 35 mph, and 74 thousand VHD at 60 mph. The VMT equaled 6.9 billion miles for this quarter. The total delay at 35 mph is 914,806 for Riverside County and 794,408 for San Bernardino County. The total delay at 60 mph is 2,791,653 for Riverside County and 2,709,302 for San Bernardino County.

Top Ten Bottleneck AM Period

Rank	County	Freeway	CA Postmile	Approximate Location	Average Extent (miles)	Total Delay (hours)	Total Duration (hours)	Period
1	Riverside	I215-N	40.929	MARTIN LUTHER KING	2.11	37708.2	189.17	AM
2	Riverside	I15-N	35.9	WEIRICK ROAD	2.20	14552.6	84.50	AM
3	Riverside	SR91-W	5.36	Lincoln Ave	1.41	13955.7	82.67	AM
4	Riverside	SR91-W	R.995	GREEN RIVER	0.91	12994.8	98.58	AM
5	Riverside	I15-N	52.27	PHILADELPHIA UC	0.51	11793.6	163.50	AM
6	Riverside	I215-S	44.908	Center St	2.31	10012.8	48.75	AM

Top Ten Bottleneck PM Period

Rank	County	Freeway	CA Postmile	Approximate Location	Average Extent (miles)	Total Delay (hours)	Total Duration (hours)	Period
1	San Bernardino	I15-N	3.2	4TH ST NB ONR	1.40	49058.8	207.58	PM
2	San Bernardino	I15-S	0.969	JURUPA	1.48	49030.1	222.42	PM
3	Riverside	I215-S	40.76	MLK SB ON	1.96	34670.4	233.42	PM
4	Riverside	SR91-E	16.247	.09 E/O JEFFERSON	1.61	34083.5	228.25	PM
5	Riverside	SR91-E	R1.065	GREEN RIVER	0.87	32222.5	237.50	PM
6	Riverside	I15-N	5.7	RANCHO CALIF. N/O	2.06	30602.4	189.00	PM
7	Riverside	SR91-E	5.89	GRAND	1.84	29909.3	266.25	PM
8	Riverside	SR91-W	10.724	PIERCE	1.24	29717.3	235.00	PM
9	Riverside	SR91-E	9.337	E/O MCKINLEY	1.75	27100.9	186.17	PM
10	San Bernardino	I210-E	2	.4 M E/O MOUNTAIN	1.12	26938.3	182.42	PM

## Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table><thead><tr><th>Period</th><th>VMT (Billions)</th></tr></thead><tbody><tr><td>2015 Q1</td><td>6.7</td></tr><tr><td>2015 Q4</td><td>7.4</td></tr><tr><td>2016 Q1</td><td>6.9</td></tr></tbody></table>	Period	VMT (Billions)	2015 Q1	6.7	2015 Q4	7.4	2016 Q1	6.9	Over one year ago	Over last quarter
		Period	VMT (Billions)								
2015 Q1	6.7										
2015 Q4	7.4										
2016 Q1	6.9										
		3.4% 	-7.4% 								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table><thead><tr><th>Period</th><th>VHD (Millions)</th></tr></thead><tbody><tr><td>2015 Q1</td><td>1.9</td></tr><tr><td>2015 Q4</td><td>1.9</td></tr><tr><td>2016 Q1</td><td>1.7</td></tr></tbody></table>	Period	VHD (Millions)	2015 Q1	1.9	2015 Q4	1.9	2016 Q1	1.7	Over one year ago	Over last quarter
		Period	VHD (Millions)								
2015 Q1	1.9										
2015 Q4	1.9										
2016 Q1	1.7										
		-9.2% 	-10.4% 								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table><thead><tr><th>Period</th><th>VHD (Thousands)</th></tr></thead><tbody><tr><td>2015 Q1</td><td>25</td></tr><tr><td>2015 Q4</td><td>25</td></tr><tr><td>2016 Q1</td><td>23</td></tr></tbody></table>	Period	VHD (Thousands)	2015 Q1	25	2015 Q4	25	2016 Q1	23	Over one year ago	Over last quarter
		Period	VHD (Thousands)								
2015 Q1	25										
2015 Q4	25										
2016 Q1	23										
		-8.2% 	-7% 								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table><thead><tr><th>Period</th><th>VHD (Millions)</th></tr></thead><tbody><tr><td>2015 Q1</td><td>5.4</td></tr><tr><td>2015 Q4</td><td>5.8</td></tr><tr><td>2016 Q1</td><td>5.5</td></tr></tbody></table>	Period	VHD (Millions)	2015 Q1	5.4	2015 Q4	5.8	2016 Q1	5.5	Over one year ago	Over last quarter
		Period	VHD (Millions)								
2015 Q1	5.4										
2015 Q4	5.8										
2016 Q1	5.5										
		2.7% 	-5.3% 								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table><thead><tr><th>Period</th><th>VHD (Thousands)</th></tr></thead><tbody><tr><td>2015 Q1</td><td>73</td></tr><tr><td>2015 Q4</td><td>77</td></tr><tr><td>2016 Q1</td><td>74</td></tr></tbody></table>	Period	VHD (Thousands)	2015 Q1	73	2015 Q4	77	2016 Q1	74	Over one year ago	Over last quarter
		Period	VHD (Thousands)								
2015 Q1	73										
2015 Q4	77										
2016 Q1	74										
		1.4% 	-3.7% 								

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Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph	<p>Hours (Thousands)</p> <p>■ 2015 Q1 ■ 2015 Q4 ■ 2016 Q1</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Monday -13.4%	Saturday -23%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Friday 11.1%	Friday 5.2%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays	<p>Hours (Thousands)</p> <p>— Weekday (2015 Q1) — Weekday (2015 Q4) — Weekday (2016 Q1)</p>	Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		5 PM -10.5%	5 PM -15.4%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		8 AM 13.1%	8 AM 26.1%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays	<p>Hours (Thousands)</p> <p>— Saturday (2015 Q1) — Saturday (2015 Q4)</p>	Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		1 PM -23.4%	5 PM -41.9%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		6 AM 100.3%	7 PM 24%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays	<p>Hours (Thousands)</p> <p>— Sunday/Holiday (2015 Q1) — Sunday/Holiday (2015 Q4) — Sunday/Holiday (2016 Q1)</p>	Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		4 PM -40.2%	5 PM -37.4%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		1 PM 21.8%	8 PM 251.1%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	<p>Hours (Millions)</p> <p>2015 Q1 2015 Q4 2016 Q1</p> <p>Riverside San Bernardino</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Riverside -15.7%	Riverside -12.6%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		-	-
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	<p>Miles</p> <p>2015 Q1 2015 Q4 2016 Q1</p> <p>AM Peak (6 AM to 10 AM) Off-Peak Day (10 AM to 3 PM) PM Peak (3 PM to 7 PM) Off-Peak Night (7 PM to 6 AM)</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		AM Peak -2.2%	PM Peak -12.1%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Off-Peak Night 2.3%	-
Average Number of Good and Bad Detectors	<p>Number of Detectors</p> <p>Average of Good Average of Bad</p> <p>2015 Q1 2015 Q4 2016 Q1</p>	Change in Good over one year ago	Change in Good over last quarter
		0%	8%
		Change in Bad over one year ago	Change in Bad over last quarter
		8%	-12%

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2016 Q1-2015 Q1		Difference 2016 Q1-2015 Q4		Rank		
		2015 Q1	2015 Q4	2016 Q1	Absolute	Percentage	Absolute	Percentage	2015 Q1	2015 Q4	2016 Q1
SR-91	Riverside	605355.7	523003.5	413064.1	-192291.6	-32%	(109,939)	-21%	1	1	1
I-15	San Bernardino	357814.8	311198.5	292131	-65683.8	-18%	(19,068)	-6%	2	2	2
I-10	San Bernardino	172930.3	207684.6	218529.7	45599.4	26%	10,845	5%	4	4	3
I-15	Riverside	277115.4	250843.7	211680.1	-65435.3	-24%	(39,164)	-16%	3	3	4
I-215	Riverside	130730.5	182869.2	192728.7	61998.2	47%	9,860	5%	6	5	5
I-210	San Bernardino	130975.5	156051.9	124074.2	-6901.3	-5%	(31,978)	-20%	5	6	6
SR-60	San Bernardino	107317	96770	85022.1	-22294.9	-21%	(11,748)	-12%	7	7	7
SR-60	Riverside	44322.3	65327.8	63852.6	19530.3	44%	(1,475)	-2%	8	8	8
I-215	San Bernardino	17360	56838.7	40221.4	22861.4	132%	(16,617)	-29%	10	9	9
SR-71	San Bernardino	11975.5	32739.5	34355	22379.5	187%	1,616	5%	11	10	10
SR-71	Riverside	22541.7	13688.9	27475.5	4933.8	22%	13,787	101%	9	11	11
I-10	Riverside	4818.8	10412.7	6004.9	1186.1	25%	(4,408)	-42%	12	12	12
SR-259	San Bernardino	48.2	157.3	74.1	25.9	54%	(83)	-53%	13	13	13
<b>TOTALS</b>		<b>1,883,306</b>	<b>1,907,586</b>	<b>1,709,213</b>	<b>-174,092</b>	<b>-9.2%</b>	<b>-198,373</b>	<b>-10.4%</b>			